

WEEKLY WEATHER AND CROP BULLETIN

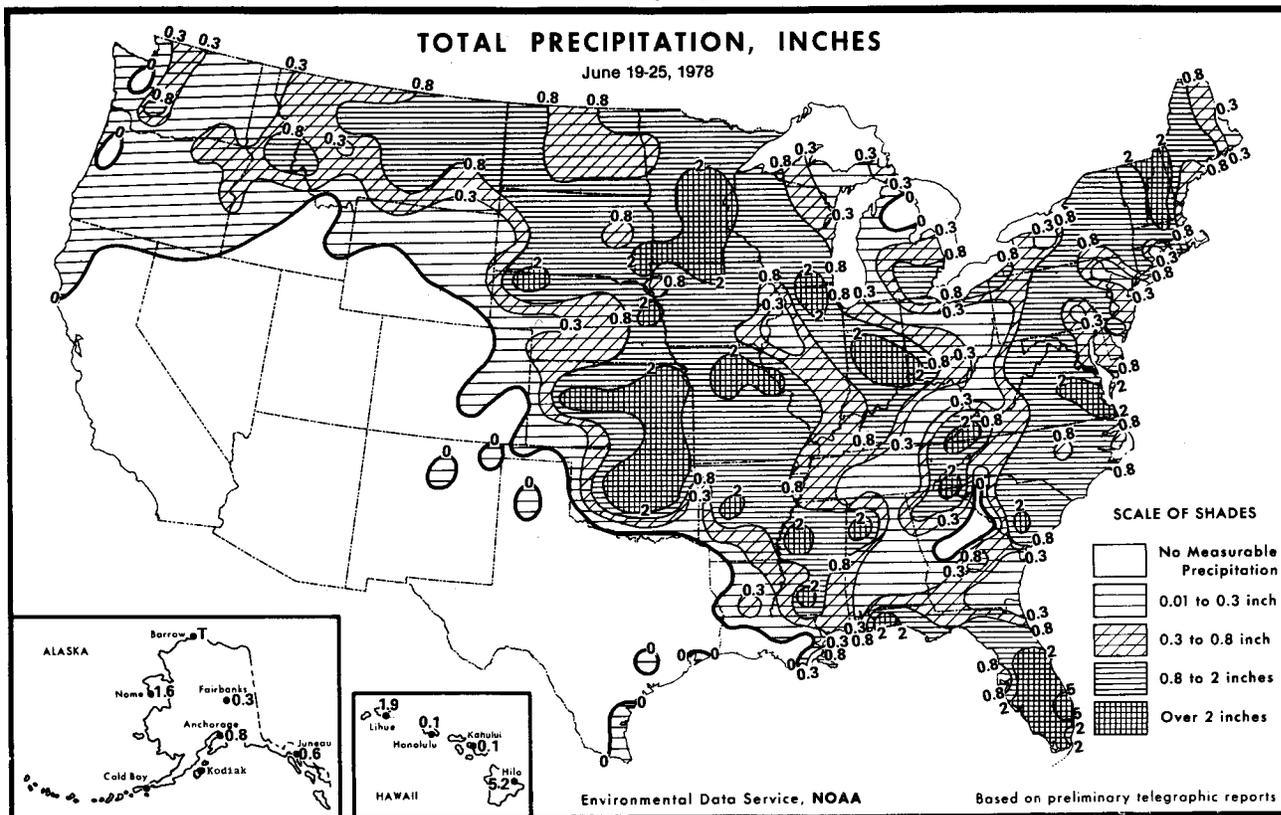
U.S. DEPARTMENT OF COMMERCE
Environmental Data Service, NOAA

U.S. DEPARTMENT OF AGRICULTURE
Economics, Statistics, and Cooperatives Service

Volume 65, No. 26

Washington, D.C.

June 27, 1978



National Agricultural Summary

June 19 - 25

HIGHLIGHTS: The slow progression of eastward-moving cold fronts continued through the northern States. Intense weather broke out along those fronts, and throughout the warm, moist air to the south. Little or no rain fell in all of Texas and the area from the Rockies westward to the Pacific Coast. An ominous disturbance in the eastern Gulf produced heavy rain over Florida's lower peninsula, but dissipated as it moved inland.

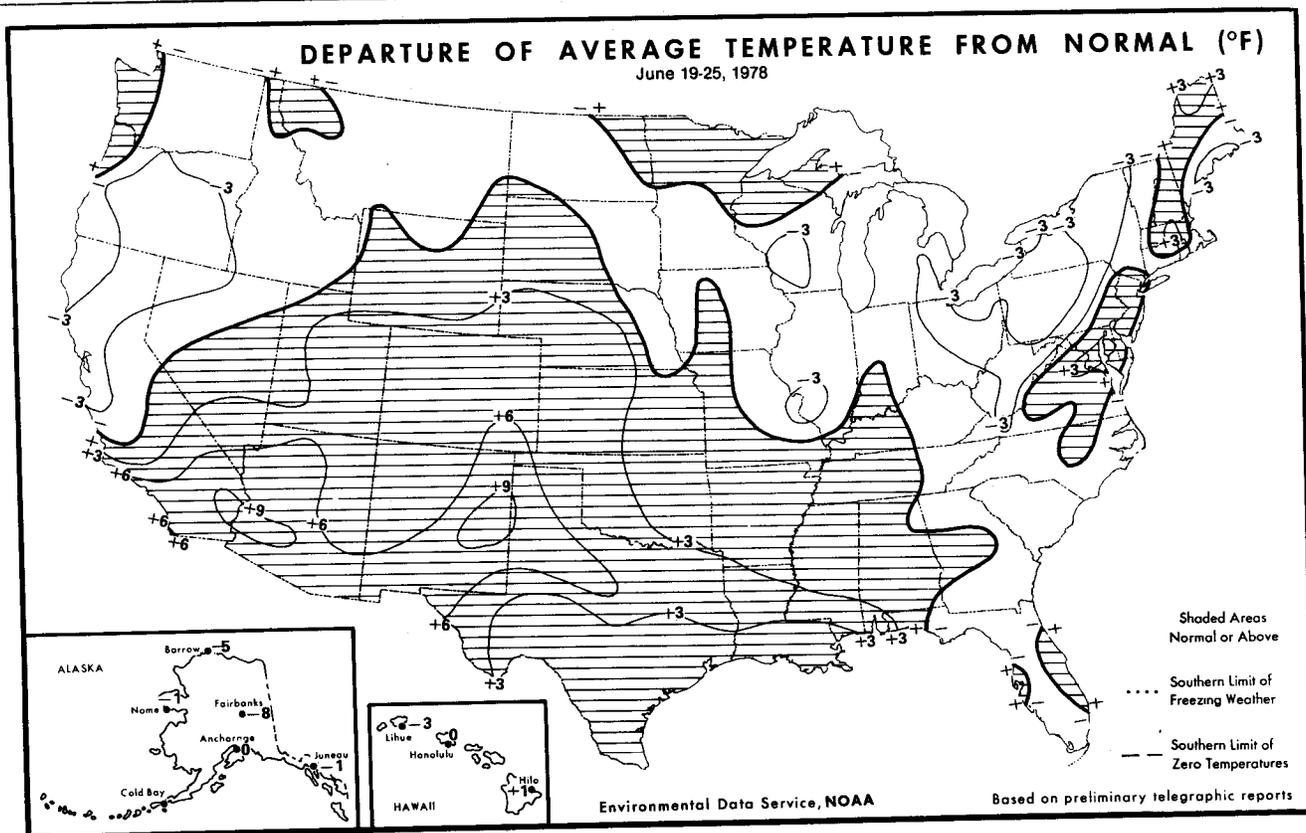
Unusually warm temperatures, even for the Southwest, meant weekly averages of up to 9 degrees above normal. Elsewhere readings ranged near normal.

Early Monday rains dumped 2 to 4 inches on northern Mississippi, the western sections of Arkansas and Tennessee, parts of Ohio, and southern Florida. By evening, thunderstorms rolled into the central Plains triggering intense downpours, large hail, and at least a dozen tornadoes. In Kansas, Topeka and Ft. Riley gathered more than two and one-half inches of rain while Omaha counted an inch and one-third and Iowa's Spencer and Mason City an inch. Storms also crossed the Tennessee and Ohio Valleys extending to the East Coast; chalking up between one and 2 inches of rain were Bowling Green,

PRICE INCREASE

Effective July 1, 1978, the annual subscription rate for the Weekly Weather and Crop Bulletin will be raised to \$13 for domestic and \$18 for foreign subscribers.

(SEE DETAILS ON PAGE 15)



Ky., Bristol, Tenn., Ft. Belvoir, Va., Albany, N.Y., and Newport, Vt.

A cold front slid through the Midwest Tuesday carrying unsettled weather from Illinois to Oklahoma. Topeka registered the largest 24-hour total, 3.37 in. Other amounts included more than an inch at Missouri's Warrensburg and Joplin, Tulsa, and Emporia, Kansas. Baseball-sized hail pummeled an area 12 miles north of Oklahoma City.

A long belt of rainstorms over the Atlantic Seaboard doused Bangor, Maine, with an inch of rain and Norfolk, Va., with 1.34 in.

Cold air covered a large section of the Rockies and Plains; Alamosa, Colo., at 33°, and Valentine, Nebr., at 42°, equaled record low readings.

Rain fell over northeastern Oklahoma early Wednesday at the rate of one to 3 inches an hour; lowland flooding resulted. Tulsa reported 2.65 in.

Thunderstorms brewed over the upper half of the Atlantic States. One to 2 inches drenched Rome, N.Y., Williamsport, Pa., Richmond and Norfolk, Va., and the Washington, D.C. vicinity.

By evening, thunderstorms popped up again over the Plains. Oklahoma City counted 2.67 in. while South Dakota's Chamberlain and Pierre saw an inch. The most intense weather, however, hit central and southeastern Nebraska where heavy rain, hail, and a trio of tornadoes blasted the area.

Thursday morning showers deposited half-inch rains on parts of Florida, Pennsylvania, and New England while hail peppered Kansas City.

By afternoon, thunderstorms formed over the Plains and middle Mississippi Valley; accumulations included 2 inches in portions of north central Nebraska, one to one and a quarter inches at Little Rock, Sioux Falls, S. Dak., and Poplar Bluff, southeastern Missouri. As the day ended, unsettled weather continued over the Plains and plagued the South. Points in Nebraska gathered another one to one and one-half inches; Jackson, Tenn., measured

1.35 in. while hail pelted Richmond, Va., and in North Carolina, Greensboro and an area near Charlotte. In Florida, 3 inches soaked Pensacola. Two tornadoes struck---one in Osceola, Arkansas, at the Tennessee border, and the other whirled past Walnut, northern Mississippi. Near midnight, large hail fell in Colorado, South Dakota, Virginia, and North Carolina.

Lubbock, Tex., at 106°, topped a 44-year-old record by one.

Morning showers over the upper half of the Mississippi Valley carried one-third to one inch of rain on Friday. By afternoon, torrential rains inundated the eastern half of Missouri; 2 to 3 inches hit many areas, and 5.7 inches drenched the town of Mexico, 25 miles northeast of Columbia.

A late evening line of thunderstorms shook portions of the western and northern Plains. Less intense storms sprang up over the lower Atlantic Coast States where Wilmington, N.C., registered one and a half inches. Five tornadoes were sighted during the day---2 in Florida and one each in Mississippi, Colorado, and Montana.

El Paso, Tex., soared to its highest temperature ever, 110°, after equaling the mark the day before. The Southwest was extremely hot with the high for the day 118° at Gila Bend, Ariz., and Presidio, Texas.

Except in the South, rainfall remained below an inch in those parts of the Nation where thunderheads formed. Two inches and more hit the vicinities of West Palm Beach and Gainesville in Florida while 1.68 in. soaked Biloxi, Miss. Some hail peppered sections of the Plains, Midwest, and North Carolina. Two tornadoes touched down in Montana and South Dakota.

Temperature extremes showed 36° at Alpena, Mich., undercutting the previous record by five, and another 100°-plus reading at El Paso for the

(continued on page 14)



National Agricultural Summary

June 19 - 25

HIGHLIGHTS: Rains slowed winter wheat harvest in the Great Plains and hay harvests in many parts of the eastern U.S. Winter wheat harvest in the major States reached 18%, less than half 1977's 37% and well behind the 32% average. Soybean planting advanced to 94%, falling between last year's 96% and the 93% average. Grain sorghum seeding shared the same figures as soybeans, reaching 94% compared with 96% in 1977 and the 93% average. Texas and Oklahoma cotton growers had only a few acres to plant. Corn growth equaled the average in extreme northern areas but lagged in the southern Corn Belt. Soil moisture rated adequate, however, shortages developed throughout the South and into parts of the north central States. Western range grasses dried and became potential fire hazards. Elsewhere grasslands and pastures rated good.

SMALL GRAINS: Rains delayed winter wheat combining in Oklahoma and Kansas. Texas had virtually no rain to interfere with harvest operations. Combining in the 11 major States reached 18%; Oklahoma growers passed the halfway mark, but Kansas producers, at 5%, were barely underway. Last year harvest stood at 37% and, on the average, 32%. Harvest in several southern States was almost complete. California harvest advanced to 50%. Washington wheat showed drought stress in eastern areas. Combining advanced into Virginia.

In the northern Great Plains, half the winter wheat turned color. In the extreme northern States, along the Canadian border heading out ranged from 20 to 60%. In the eastern Corn Belt, 5% of the Ohio crop was ripe, 10% was ripe in Indiana, and 35% in Illinois.

CORN: Crop development lagged recent years because of the late planting season but most corn rated good. In the South tasseling ranged from 42% in Mississippi to 44% in Alabama, and 83% in Louisiana. Corn borers infested Kentucky and Tennessee corn. Texas corn reached roasting ear stage; growers irrigated some High Plains fields. The Florida and Georgia crops also needed water.

In the western north central States, corn growth ranged from 11 to 19 inches, 3 or 4 inches less than the usual growth and far behind the early season last year. Growers cultivated, fertilized, and irrigated.

In the eastern north central States, growth ranged from 14 to 20 inches, almost equal the average in most States but well behind normal in Illinois and Indiana. Rains improved the Wisconsin crop. Michigan stands recovered from the previous week's frost, however, late planted stands were spotty.

SOYBEANS: Planting advanced to 94%, only 2 points less than last year and 1 point ahead of the average. Rains delayed seeding in parts of the Delta States, but elsewhere planting was almost complete.

Seeding reached 97% in the eastern north central States, equal the average; last year planting was finished. Stands rated fair to good though uneven in Wisconsin. Growth reached 5 to 6 inches, 2 inches less than normal.

In the western north central States, soybean seeding reached 96%, 3 points less than last year but 1 point ahead of average. Minnesota soybeans grew to 7 inches, 1 inch short of average. Iowa weed control was good.

In the south central States, planting stood at 89% - 1 point less than last year but 2 points ahead of average. Stands rated good.

COTTON: Cotton planting ended except in Texas and Oklahoma where seeding in each State advanced to 98%. Texas stands scored good; while North Texas growers finished planting, southern growers picked the first cotton for the 1978 season. Oklahoma cotton rated fair to good with less disease in recent plantings. California cotton rated good in spite of cool weather. Cotton stands in the Delta and the Southeast stood fair to good. Squaring ranged from 23% in Alabama to 35% in Louisiana, 45% in South Carolina, 48% in Mississippi, and 63% in Georgia. East of the Mississippi River only Georgia reported bolls setting.

OTHER CROPS: Grain sorghum planting advanced to 94%, short of 1977's 96% but a point ahead of the average. Missouri, at 88%, lagged the other major States but surpassed its own average progress by 1 point. Seedings emerged to good stands. Texas growers anticipate harvest very soon.

Rice generally rated good. California seedings were complete. Louisiana's rice was 20% headed and Texas growers prepared for harvest operations. Arkansas growers contended with high water weevil populations, weedy fields, and salty water.

Maine potatoes rated excellent and growing rapidly. Idaho potatoes were 80% emerged with half of that acreage showing growth of 6 inches or more.

Peanuts in eastern production areas advanced well into the bloom stage; pegging stood at 15% in Alabama and 39% in Georgia. Texas peanut planting continued to lag -- this time because of short moisture -- at 81% compared with 1977's 89% and the 86% average.

FRUIT AND NUTS: Sweet cherry harvest got underway in Michigan and Washington; hail damaged some New York cherries. Apples and peaches sized well. Peach harvest advanced to 15 or 16% in the Carolinas and Mississippi, and 41% in Georgia. In the West, fruit growers harvested grapes, peaches, plums, nectarines, and apricots. Valencia harvests continued in California, Arizona, and Florida.

VEGETABLES: Summer vegetable harvests were active in northern areas. Wisconsin and Oregon harvested early peas. Michigan asparagus harvest reached 95%. South Carolina shipped watermelons and tomatoes. Florida vegetable shipments declined seasonally; supplies of most vegetables were light, and only watermelon harvest was active. Harvests of a wide variety of Texas vegetables continued. California market tomato shipments increased slowly; growers also harvested sweet corn, melons, and dry onions.

PASTURES AND LIVESTOCK: Most pastures rated good. Only Florida and several western States reported hot, dry conditions and deteriorated grasslands. Texas stock water supplies were low but recent rains improved grazing conditions. Southwestern rangelands dried and presented a potential fire hazard. Snow at high elevations slowed cattle movement to summer ranges in Utah.

Temperature and Precipitation Data for the Week Ending Midnight, l.s.t., June 25, 1978

States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches		States and Stations	Temperature °F		Precipitation Inches	
	Average	Departure	Total	Departure		Average	Departure	Total	Departure		Average	Departure	Total	Departure
ALA. Birmingham . . .	79	0	T	-1.0	LA. Baton Rouge . . .	83	+2	.1	-.8	Youngstown . . .	66	-3	.3	-.5
Mobile . . .	84	+3	.2	-1.4	Lake Charles . . .	83	+1	0	-1.2	OKLA. Okla. City . . .	81	+3	2.8	+1.9
Montgomery . . .	81	+1	.1	-.9	New Orleans . . .	82	+1	T	-1.2	Tulsa . . .	79	0	3.2	+2.1
ALASKA. Anchorage . . .	56	0	.8	+ .5	Shreveport . . .	84	+3	0	-.7	OREG. Astoria . . .	58	+1	.1	-.4
Barrow . . .	30	-5	T	-.1	MAINE. Caribou . . .	64	+3	.3	-.5	Burns . . .	57	-4	.1	-.1
Fairbanks . . .	53	-8	.3	-.1	Portland . . .	61	+3	.3	-.4	Medford . . .	65	-1	.1	-.1
Juneau . . .	53	-1	.6	-.1	MD. Baltimore . . .	76	+2	.4	-.5	Pendleton . . .	65	-2	.5	+ .3
Kodiak . . .	-	-	-	-	MASS. Boston . . .	67	-3	.4	-.3	Portland . . .	63	0	.1	-.2
Nome . . .	46	-1	1.6	+1.3	Chatham . . .	65	-	.4	-	Salem . . .	63	+1	T	+ .3
ARIZ. Flagstaff . . .	67	+7	0	-.2	MICH. Alpena . . .	62	-1	0	-.7	PA. Allentown . . .	73	+2	1.3	+ .5
Phoenix . . .	95	+9	0	-.1	Detroit . . .	68	-2	1.1	+ .3	Erie . . .	66	-1	.9	+ .1
Tucson . . .	90	+6	0	-.1	Flint . . .	65	-3	.5	-.3	Harrisburg . . .	71	-3	.2	-.5
Winslow . . .	79	+5	0	-.1	Grand Rapids . . .	67	-2	.4	-.4	Philadelphia . . .	76	+2	.6	-.3
Yuma . . .	96	+8	0	0	Houghton Lake . . .	63	-1	T	-.8	Pittsburgh . . .	70	0	.2	-.6
ARK. Fort Smith . . .	79	0	.2	-.6	Lansing . . .	67	-2	.9	+ .1	Scranton . . .	67	-3	T	-.8
Little Rock . . .	80	0	1.8	+1.0	Marquette . . .	62	0	.1	-.7	R.I. Providence . . .	71	+3	1.0	+ .4
CALIF. Bakersfield . . .	79	0	0	0	Muskegon . . .	65	-2	.2	-.4	S.C. Charleston . . .	78	-1	1.2	-.4
Eureka . . .	56	0	.2	+ .1	S. St. Marie . . .	59	-1	.5	-.3	Columbia . . .	78	-2	1.0	0
Fresno . . .	75	0	0	0	MINN. Duluth . . .	62	+1	1.3	+ .2	Greenville . . .	76	-1	T	-1.0
Los Angeles . . .	76	+7	0	0	Internat'l Falls . . .	63	+1	1.6	+ .6	S.D. Aberdeen . . .	67	0	1.3	+ .4
Red Bluff . . .	74	-3	0	-.1	Minneapolis . . .	69	0	3.6	+2.7	Huron . . .	68	-1	.4	-.5
San Diego . . .	75	+6	0	0	Rochester . . .	67	-1	1.1	0	Rapid City . . .	68	+2	.1	-.8
San Francisco . . .	59	-3	0	0	St. Cloud . . .	66	-1	2.6	+1.5	Sioux Falls . . .	68	-1	2.5	+1.5
Stockton . . .	71	-2	0	0	MISS. Jackson . . .	83	+2	.4	-.4	TENN. Chattanooga . . .	77	0	.1	-.8
COLO. Denver . . .	73	+5	T	-.4	Meridian . . .	81	+1	.6	-.3	Knoxville . . .	76	-1	1.1	+ .2
Grand Junction . . .	77	+4	0	-.1	MO. Columbia . . .	74	-1	1.7	+ .6	Memphis . . .	81	+1	.7	-.1
Pueblo . . .	77	+4	T	-.3	Kansas City . . .	76	0	1.8	+ .5	Nashville . . .	79	+1	T	-.8
CONN. Bridgeport . . .	69	-1	.8	+ .2	St. Louis . . .	74	-3	1.1	0	TEX. Abilene . . .	89	+7	0	-.6
Hartford . . .	72	+2	.3	-.5	Springfield . . .	76	+1	.9	-.2	Amarillo . . .	82	+6	T	-.8
D.C. Washington . . .	79	+3	.6	-.2	MONT. Billings . . .	64	-1	1.4	+ .8	Austin . . .	84	+1	0	-.7
FLA. Apalachicola . . .	79	-2	1.2	-.2	Glasgow . . .	63	-1	1.7	+1.0	Baumont . . .	84	+2	0	-1.1
Daytona Beach . . .	81	+1	.9	-.8	Great Falls . . .	61	-2	1.0	+ .3	Brownsville . . .	85	+2	.1	-.5
Ft. Myers . . .	81	-1	2.7	+ .4	Havre . . .	62	-2	.7	+ .1	Corpus Christi . . .	84	+1	.1	-.5
Jacksonville . . .	78	-2	.2	-1.4	Helena . . .	61	0	.1	-.4	Dallas . . .	-	-	-	-
Key West . . .	83	-1	2.1	+1.0	Kalispell . . .	59	+1	.5	-.1	Del Rio . . .	86	+1	0	-.4
Lakeland . . .	79	-2	2.5	+ .8	Miles City . . .	67	0	.5	-.3	El Paso . . .	89	+7	0	-.2
Miami . . .	81	0	1.2	-.0	Missoula . . .	60	-1	.5	0	Fort Worth . . .	86	+4	0	-.6
Orlando . . .	82	+1	2.7	+1.8	NEBR. Grand Island . . .	77	+4	.4	-.6	Galveston . . .	85	+3	0	-1.0
Tallahassee . . .	79	-2	.7	-1.0	Lincoln . . .	72	-2	1.9	+ .7	Houston . . .	82	0	0	-1.0
Tampa . . .	81	0	.7	-1.0	Norfolk . . .	72	0	.9	-.2	Lubbock . . .	87	+8	0	-.6
W. Palm Beach . . .	81	0	6.0	+4.0	N. Platte . . .	74	+4	.2	-.7	Midland . . .	84	+3	0	-.3
GA. Atlanta . . .	77	0	.3	-.6	Omaha . . .	72	0	1.8	+ .6	San Angelo . . .	85	+2	0	-.4
Augusta . . .	79	0	T	-.9	Valentine . . .	71	+2	1.8	+1.0	San Antonio . . .	85	+2	0	-.6
Macon . . .	82	+1	T	-.9	NEV. Ely . . .	61	+1	0	-.2	Victoria . . .	84	+1	T	-.7
Savannah . . .	80	0	.1	-1.4	Las Vegas . . .	90	+6	0	0	Waco . . .	86	+3	0	-.5
HAWAII. Hilo . . .	76	+1	5.2	+3.7	Reno . . .	61	-2	0	-.1	Wichita Falls . . .	87	+4	0	-.7
Honolulu . . .	79	0	.1	0	Winnemucca . . .	61	-3	0	-.2	UTAH. Blanding . . .	-	-	-	-
Kahului . . .	79	+2	.1	+ .1	N.H. Concord . . .	68	+2	1.4	+ .6	Salt Lake City . . .	72	+4	0	-.3
Lihue . . .	75	-3	1.9	+1.5	N.J. Atlantic City . . .	72	0	.6	-.2	VT. Burlington . . .	64	-3	1.0	+ .2
IDAHO. Boise . . .	65	-2	.1	-.1	Trenton . . .	74	+1	.4	-.4	VA. Lynchburg . . .	74	0	1.3	+ .5
Lewiston . . .	67	0	.2	-.2	N.MEX. Albuquerque . . .	81	+5	0	-.1	Norfolk . . .	76	0	3.3	+2.4
Pocatello . . .	63	-1	T	-.3	Roswell . . .	87	+9	0	-.3	Richmond . . .	76	0	2.3	+1.4
ILL. Cairo . . .	79	0	.6	-.4	N.Y. Albany . . .	67	-2	1.4	+ .7	Roanoke . . .	74	+1	.6	-.2
Chicago . . .	70	-2	.6	-.4	Binghamton . . .	64	-3	.7	-.1	WASH. Colville . . .	62	-1	.1	-.3
Moline . . .	72	-1	.2	-.9	Buffalo . . .	65	-3	.4	-.1	Omak . . .	65	-1	.1	-.2
Peoria . . .	72	-1	.2	-.7	New York . . .	76	+3	.2	-.5	Quillayute . . .	57	+1	.2	-.6
Rockford . . .	69	-2	2.6	+1.5	Rochester . . .	67	-2	.2	-.4	Seattle-Tacoma . . .	62	+1	T	-.3
Springfield . . .	74	-1	.3	-.7	Syracuse . . .	64	-5	1.5	+ .8	Spokane . . .	62	-1	.2	-.1
IND. Evansville . . .	76	0	.2	-.6	N.C. Asheville . . .	71	-1	.2	-.8	Walla Walla . . .	67	-2	.4	+ .2
Ft. Wayne . . .	69	-2	.2	-.7	Charlotte . . .	77	0	1.1	+ .2	Yakima . . .	64	-2	.1	0
Indianapolis . . .	73	0	3.1	+2.1	Greensboro . . .	74	-2	1.0	0	W.Va. Beckley . . .	66	-3	T	-1.0
South Bend . . .	69	-1	.2	-.7	Hatteras . . .	75	-1	.1	-1.1	Charleston . . .	71	-2	.2	-.6
IOWA. Burlington . . .	72	-1	.2	-.9	Raleigh . . .	77	+1	.3	-.6	Huntington . . .	73	-1	.3	-.5
Des Moines . . .	73	+1	1.3	+ .2	Wilmingon . . .	78	-1	1.5	+ .1	Parkersburg . . .	70	-4	T	-1.0
Dubuque . . .	67	-2	.5	-.8	N.DAK. Bismarck . . .	64	-2	.6	-.3	WIS. Green Bay . . .	65	-1	.6	-.2
Sioux City . . .	71	-1	.5	-.6	Fargo . . .	67	0	.8	0	La Crosse . . .	67	-3	1.1	0
KANS. Concordia . . .	77	+3	1.1	-.1	Walliston . . .	64	-1	.8	0	Madison . . .	65	-3	2.0	+ .9
Dodge City . . .	80	+4	.2	-.6	OHIO. Akron-Canton . . .	68	-2	.3	-.5	Milwaukee . . .	65	-1	.8	-.1
Goodland . . .	75	+4	.1	-.6	Cincinnati . . .	72	-2	2.7	+1.8	WYO. Casper . . .	66	+2	.3	0
Topeka . . .	75	0	3.6	+2.2	Cleveland . . .	70	0	1.2	+ .4	Cheyenne . . .	66	+3	0	-.6
Wichita . . .	80	+2	.9	-.2	Columbus . . .	69	-3	.7	-.3	Lander . . .	65	+2	T	-.4
KY. Lexington . . .	75	-1	.2	-.8	Dayton . . .	71	-2	.6	-.3	Sheridan . . .	61	-2	.1	-.6
Louisville . . .	75	0	.8	-.1	Toledo . . .	67	-4	1.1	+ .3	P.R. San Juan . . .	83	+2	.7	-.5

Based on 1941-70 normals

Publication of the Weekly Weather and Crop Bulletin began in 1872 as the Weekly Weather Chronicle. It is issued under general authority of the Act of January 12, 1895 (44USC 213), 53d Congress, 3d Session. Contents of the Bulletin may be reprinted freely, with proper credit. Standard copy for the Bulletin is prepared by Donald J. Haddock, Lyle Denny, and O. W. Byrd, Environmental Data Service, National Oceanic and

Atmospheric Administration; Harry DeLong and Jim Carlin, Economics, Statistics, and Cooperatives Service, U.S. Department of Agriculture. Yearly subscription rate: \$5.00 domestic and \$11.25 foreign airmail. Order from the Weekly Weather and Crop Bulletin, South Building Mail Unit, Room 1248, USDA, Washington, D.C. 20250. Make checks payable to Department of Commerce, NOAA.

State Summaries of Weather and Agriculture

These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by ESCS State offices in cooperation with the National Weather Service.

ALABAMA: Hot with widely scattered showers. Temperatures 2° above normal.

Fieldwork: 5.7 days suitable. Soil moisture short to adequate. Cotton fair to good condition; 23% squaring, 50% 1977, 39% average. Corn fair to good condition; 44% tasseling, 51% 1977, 38% average. Soybeans 92% planted, 83% 1977, 91% average. Peanuts fair to good condition; 15% pegging, 20% 1977, 25% average. Wheat harvest 74% completed, 92% 1977, 84% average.

ALASKA: Temperatures near or slightly below normal. Rain fell through the week. Seasonal rainfall is now slightly above normal.

Some hay cutting but rainy, cool, and cloudy weather slowed activities. Small grain in pre-boot stage. Ground moisture short to adequate. Vegetable crops good to above average growth.

ARIZONA: Hot, dry weather. Near record daily high temperatures, no precipitation. Average temperatures 3 to 10° above normal.

Cotton good progress, some bolls nearing maturity. Sorghum planting continues, early fields heading. Small grain harvest full swing some areas, winding down others. Safflower good progress. Sugarbeet harvest excellent progress. Alfalfa haying ahead of normal. Watermelon, cantaloup harvest full swing. Dry onion harvest nearly complete, good quality. Potatoes harvested, manufacturing stock. Harvest grapes, peaches, plums continued. Valencia harvest nearly completed. Grapefruit harvest active. Desert ranges deteriorating; ranges higher elevations good condition. Topsoil moisture short desert, adequate mountains. Stock water adequate. Cattle, calves good condition. Screwworms, pinkeye some areas.

ARKANSAS: Significant rainfall over most of State, 1.00 to 2.00 in. common. Temperatures slightly above normal. Highest temperature 102°, lowest 57°.

Rain slowed fieldwork. Fieldwork: 4.6 days available. Soil moisture adequate, except southwest short. Soybean planting near complete; cyst nematode severe some areas; condition good. Early varieties show good growth; planting 89%, 92% 1977, 92% average. Some cotton fields squaring. Herbicide treatment and cultivation continued. Crop fair to good condition. Rice crop rated good; water weevil heavy in many areas; fields weedy and salty. Corn in full tassel; ear worm damage reported. Sorghum 98% planted, rated good. Rain slowed wheat harvest; 81% harvested, complete 1977, 97% average. Oats 85% harvested. Peaches in good condition. Tomato harvest near peak. Pasture condition average. Hay harvest continued. Cattle gaining well.

CALIFORNIA: Temperatures few to several degrees below normal; exception south coast and southeastern interior, average temperatures were as much as 10° above normal. Precipitation almost nonexistent except light showers Sierra Nevada and north coast mountains. Weather generally cool.

Barley 66% harvested. Wheat 50% harvested. Dry beans and corn double cropping continue on harvested fields. Stubbles being burned. Corn making good growth. Sugarbeets being treated for mildew. Cotton growth good despite cool

weather; major insect problems light. Rice seeding complete; weed spraying needed, some spot seeding. Freestone peach, plum, nectarine and apricot harvests active. Perlette grapes near completion in desert where picking thompson seedless for table use gained momentum. Thinning and girdling table grapes later areas. Valencia harvest still active; Kern County complete. Grapefruit picking nearly done desert areas, active elsewhere. Avocado harvest normal. Pest control active; other cultural procedures normal. Cantaloup harvest decreasing Imperial Valley. Sweet corn decreasing desert; increasing later areas. Dry onions peaking Stockton, continue Kern district. Market tomato shipments increasing slowly. Movement livestock summer pastures, market, feedlots. Placements feedlots high. Fire hazard high on rangeland. Stock water supplies excellent.

COLORADO: Warm dry weather; widely scattered thundershowers eastern plains. Mountains and west little rainfall. Above seasonal temperatures; Plains 3 to 6° above normal, mountain readings normal. Snowmelt keeps streams high. Flows lower than last week.

Winter wheat good; turned 50%, 82% 1977, 56% average. Oats, potatoes good condition. Winter barley good; turned 41%, 72% 1977. Sorghum emerged 85%, 100% 1977, 81% average. Corn good condition; height 13 in., 23 in. 1977. Dry beans good; planted 98%, 97% 1977, 93% average; emerged 88%, 88% 1977, 71% average. Sugarbeets very good; thinned 92%, 100% 1977, 84% average. Alfalfa good; first cutting 62%, 66% 1977. Fieldwork: 6.5 days suitable. Ranges and pastures good condition. Livestock very good condition.

FLORIDA: Cloudy, rainy weather Peninsula during midweek gave way to sunshine and scattered afternoon thundershowers weekend. Panhandle generally fair and dry. Rain north central and central averaged 2.00 to 3.00 in. with 3.00 to 5.00 in. south. Temperatures near normal with some afternoon readings at week's end near 100° Panhandle.

Soil moisture mostly adequate south central and extreme west, short in north and eastern half of the Panhandle. Corn good condition, need rain in drier areas. Peanuts, sugarcane good condition. Tobacco harvest starting. Soybean planting continues active. Hay making underway. Pasture condition mostly good central, south. Grass responding well to frequent afternoon, evening showers. Growth rapid. Some northern pastures suffering hot, dry weather. Cattle condition generally good. Citrus grove condition excellent. New growth progressing well, some blocks need more care, remaining Valencias holding well. Most vegetable crops harvested for season. Watermelon harvest very active north, north central areas. Light supplies available west. Sweet corn, green peppers, eggplant, okra light to moderate volume. Light supplies available celery, cucumbers, potatoes, tomatoes.

GEORGIA: Temperatures 2 to 5° below normal; averages near 70° mountains, upper 70's central and south. Widely scattered thundershowers; amounts locally 0.25 to 0.50 in., locally in excess of 1.00 in. Widely scattered thundershowers south 24th and 25th.

Soil moisture short to very short. Fieldwork: 6 days suitable. Corn fair to good, off sharply, needs moisture; insect problems especially northern areas. Peanuts good; 81% blooming, 80% last year; 39% pegging, 58% last year. Tobacco good condition; 4% harvested, 10% last year, 15% average. Cotton fair to good condition; 63% squaring, 70% last year, 55% average; 16% setting bolls, 42% last year, 20% average. Soybeans fair to mostly good; 89% planted, 86% last year, 87% average. Grain sorghum 74% planted, 60% last year, 73% average. Watermelons and vegetable crops fair to good. Watermelon harvest lagging; 5% this year, 35% last year. Small grain harvest active; wheat 84%, 96% last year, 89% average; oats 87% harvested, 96% last year, 88% average. Peaches fair to mostly good condition; 41% harvested, 66% last year, 53% average. Apples good condition. Hay and pastures fair to mostly good. Cattle and hogs good.

HAWAII: Weather favorable. Rains continue all Islands. Occasionally heavy.

Some leafy crops volcano area Hawaii Island affected by rains; chinese cabbage, growth crack; head lettuce, spoilage. Rains generally beneficial throughout State. Banana production light. Papayas sprayed frequently; prevent disease outbreak from rains. Sugar harvesting active. Pineapple peak harvesting. Pastures fair to good; ample forage most sections.

IDAHO: Temperatures above normal north, slightly below normal south. High temperatures ranged 78 to 92°, low 29°. Precipitation light and spotty.

Winter wheat 60% headed, spring wheat and barley 25% headed; last year 95% and 65%, respectively. Potatoes 80% emerged, 40% with growth over 6 in., last year 95% emerged, 60% over 6 in. Ranges and livestock in good condition.

ILLINOIS: Temperatures 3° below normal north, normal south. Precipitation light central and southwest; heaviest northeast and east southeast.

Corn average height 20 in., 49 in. 1977, 38 in. average; advanced fields 35 in., 64 in. 1977, average 53 in.; condition good. Soybeans 97% planted, 100% 1977 and average; condition good to fair. Winter wheat turned yellow 75%, 100% both 1977 and average; crop 35% ripe, 100% 1977, 88% average; good to fair. Oats 80% headed, 100% 1977, average 95%; 35% filled, 84% 1977, 74% average; condition good to fair. Sorghum planting 90%. Second crop alfalfa hay 20% cut, 30% 1977, 18% average; condition good. Fieldwork: 5.3 days suitable. Soil moisture adequate.

INDIANA: Severe weekend thunderstorms moved from upper west central to southeast resulting in 2.00 to 7.00 in. of rain, high winds, property damage, flash flooding and soil erosion. Northeast and southwest averaged only 0.00 to 0.40 in. Temperatures near normal, from 42° on 22nd to 97° on 25th.

Fieldwork: 5 days suitable. Topsoil moisture short to mostly adequate. Subsoil moisture adequate. Soybeans 95% planted, 1977 100%, average 90%; condition fair to good; height 5 in., 1977 9 in., average 7 in. Corn fair to mostly good; height 15 in., 1977 35 in., average 22 in. Wheat 10% ripe. Oats 70% headed. Alfalfa hay 30% cut, 1977 35%. Clover 80% cut, 1977 90%. Pastures fair to good.

IOWA: Seasonable temperatures with moderate to locally heavy showers and thunderstorms. Localized wind, hail, and flooding reported.

Topsoil and subsoil moisture adequate. Corn, oats, wheat, hays, and pasture good condition. Average tallest corn height: 28 in., last year 57 in. Average corn height 19 in., last year, 43 in. Weed control in corn, good; soybeans, fair to good. Stand of soybeans letting 100% equal full stand 90%, last year 89%, normal 90%. First crop alfalfa hay harvested 90%, last year 100%, normal 85%. First crop of clover hay harvested 57%, last year 87%, normal 57%. Oat acreage headed 74%, last year 100%, normal 84%. Fieldwork: 4.1 days suitable. Livestock condition good.

KANSAS: Local heavy rains central and east first of week averaging 1.00 to 2.00 in., little moisture along western border. Temperatures averaged 77° northwest and 80° southwest and central; 1 to 2° above normal east and south central to 4 to 6° above normal elsewhere.

Wheat harvest slowed by rain; 5% harvested, 30% last year, 25% average. Wheat ripe 20%, 80% last year, 55% average. Sorghum planting 90% completed, same last year, 85% average. Soybean planting 85% complete, same last year, 80% average. First cutting alfalfa completed; second cutting 25% complete, 35% last year, equal to average.

KENTUCKY: Temperatures little above normal. Precipitation averaged around 1.00 in. central to less than 0.50 in. far west and far east.

Fieldwork: 4.6 days favorable. Soil moisture adequate. Major crops all planted. Some re-planting of tobacco necessary because of weather and cutworm damage. Corn averaging 27 in. in height and soybeans averaging 6 in. Corn borer infestation heavy, but no major damage yet. Spraying active. Harvesting of a very good hay crop in full swing.

LOUISIANA: Temperatures normal south; 3° above north. Extremes: 101 and 67°.

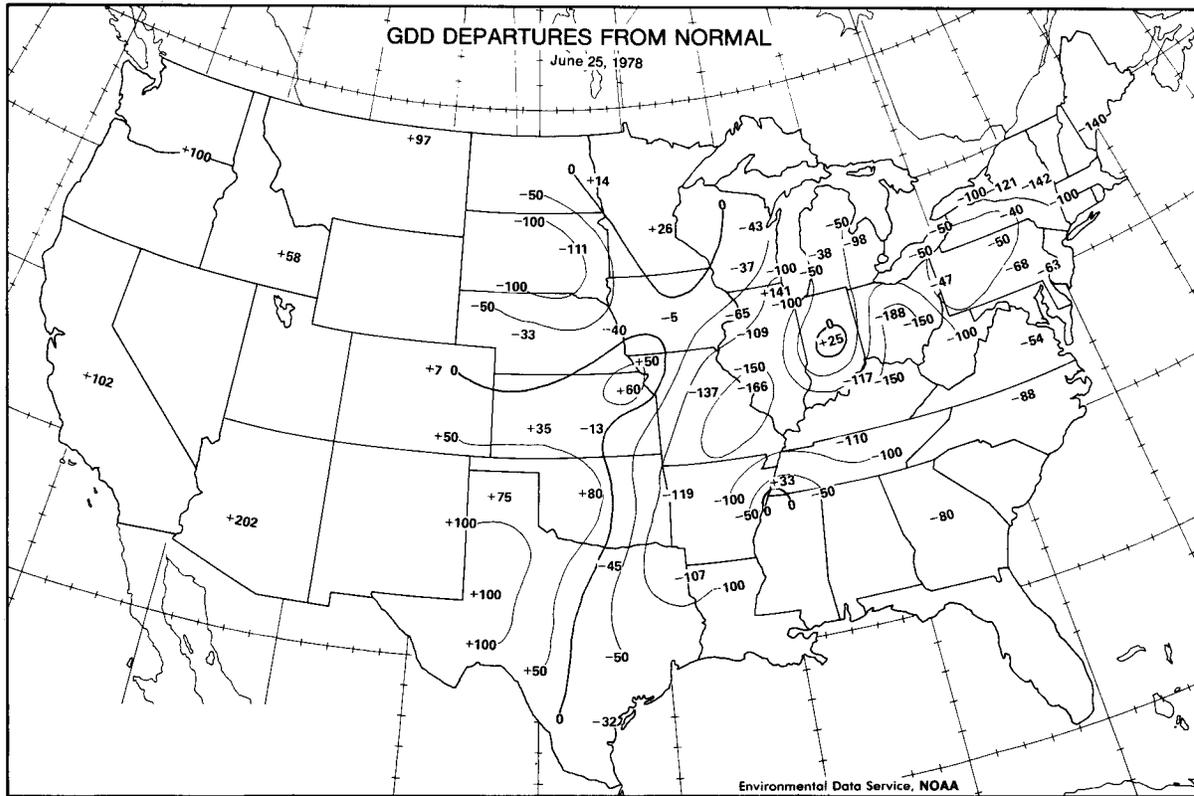
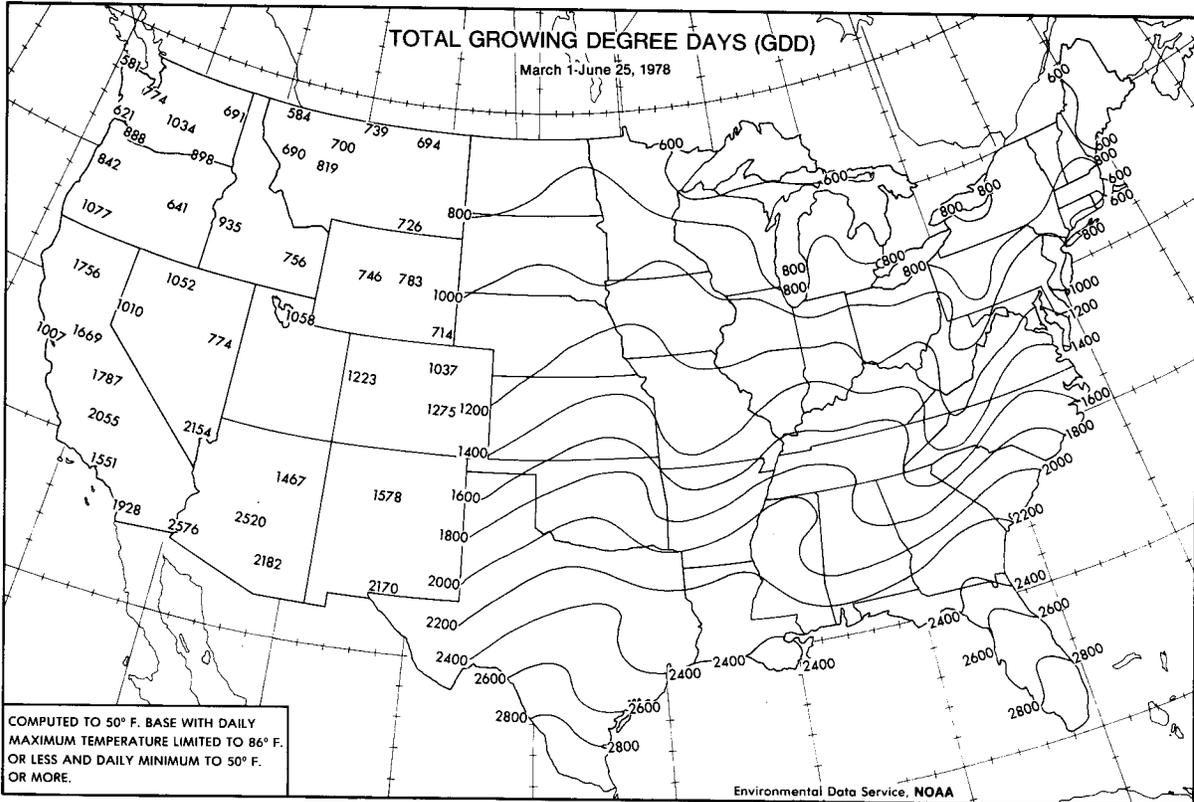
Fieldwork: 5.7 days suitable. Main activities: Planting, weed control and haying. Soil moisture short. Soybean planting 94%, 89% last year, 85% average; 83% up to stand; fair to good, re-planting southwest. Cotton fair to good; 35% squaring, 53% last year. Sorghum 95% planted, 88% last year, 82% average; 86% up to stand; fair to good. Corn good, 83% tasseled. Sweetpotatoes 94% transplanted, 87% last year, 92% average; good condition. Peaches, sugarcane fair to good. Rice good; 20% headed. Wheat, oat harvest nearing completion. Livestock good. Pastures, hay fair to good.

MARYLAND & DELAWARE: Temperatures 2° above normal. Highs in 90's, lows in 50's. Precipitation moderate, 0.50 to 1.00 in. Weekend sunny.

Fieldwork: 5.8 days suitable. Soil moisture supplies adequate. Pastures supplying average to above average amounts of feed. Corn stand generally good. Soybeans 85% planted, 88% 1977, 83% average. Barley and rye harvest underway. Haymaking in full swing. Tobacco transplanting 75% complete.

MICHIGAN: Temperatures averaged normal to 5° below. Lower Peninsula warmest 19th and 20th with temperatures in 60's. Precipitation southeast half Lower 0.20 to 1.20 in., northwest Lower 0.10 in.

Fieldwork: 6 days suitable. Soil moisture adequate, short south central. Some irrigation started. Main activities: Cultivating potatoes, corn, replanting some soybeans, haymaking. Corn height 14 in., 20 in. last year, 13 in. normal. Early corn looks good, late planted spotty.



Many fields recovering from last week's frost. Dry beans 90% planted, 90% last year, 75% normal. Soybean planting complete. Wheat 90% headed. Less than 5% turned yellow, 50% last year, 25% normal; 20% oats headed, 60% last year, 30% normal. First cut hay 60% complete, 80% last year, 50% normal. Sweet cherry harvest starting. Asparagus harvest 95% complete. Strawberries 40% picked. Carrots, celery, onion development slightly below average due to cool spring.

MINNESOTA: Temperatures near normal. Extremes: 92 and 38°. Precipitation totaled less than 0.30 in. most of north third and 0.50 to 1.50 in. most of central and south. Precipitation averaged from 0.50 to 0.80 in. below normal most of north third, near normal to 2.60 in. above normal southern two-thirds.

Crops growing well. Moisture mostly adequate; few wet areas in south, dry areas in extreme northwest.

Height: Corn 18 in., 1977 41 in., normal 22 in.; soybeans 7 in., 1977 12 in., normal 8 in. Heading: Spring wheat 20%, 1977 88%, normal 51%; oats 30%, 1977 92%, normal 57%; barley 26%, 1977 93%, normal 51%; winter wheat 93%, 1977 99%, normal 88%; rye 94%, 1977 99%, normal 94%. Flax 13% blooming, 1977 53%, normal 24%. First crop alfalfa 79% cut, 1977 92%, normal 78%.

MISSISSIPPI: Temperatures average to just below normal. Extremes: 62 and 98°. Rainfall spotty.

Soil moisture short to adequate south, adequate elsewhere. Fieldwork: 4.9 days suitable. Crops improving, weeds problem some fields. Soybeans 88% planted, 90% 1977, 83% average; 72% up to stand, 72% 1977. Cotton 48% squaring, 85% 1977, 39% average; 1% blooming, 30% 1977; not yet setting bolls, 15% 1977, 7% average. Corn 42% silked, 54% 1977; 8% in dough stage, 14% 1977. Sorghums 82% planted, 80% 1977, 82% average. Sweetpotatoes 91% planted, 92% 1977, 84% average. Winter wheat 83% harvested, 86% average. Oats 85% harvested, 87% average. Hay crops 38% harvested, 40% 1977, 36% average. Irish potatoes 75% harvested, 75% 1977, 67% average. Peaches 15% harvested, 43% 1977, 30% average. Cucumbers 34% harvested, 47% 1977. Watermelon 1% harvested. Cotton fair to good condition. Soybeans, rice, corn, pasture good condition. Peaches good to fair condition.

MISSOURI: Rain 1.00 to 2.00 in. Heaviest in west central plains with 4.50 in. one location. Temperatures near normal.

Fieldwork: 4.5 days suitable. Soybeans 90% planted, last year 100%, normal 85%. Grain sorghum 88% planted, last year 97%, normal 87%. Wheat 87% turning color, last year and normal 100%. Wheat 47% ripened, last year 94%, normal 68%. Wheat 21% harvested, last year 57%, normal 35%. Alfalfa hay first cutting 84% harvested, last year 100%, normal 96%. Other hay 58% harvested. Condition of wheat and pasture mostly fair to good. Soil moisture supply mostly short to adequate.

MONTANA: Wide range of weather, although temperatures near normal. Frequent, heavy showers and thunderstorms over weekend. Some thunderstorms produced hail, heavy rain, and damaging winds weekend. Except for north central and southeast, precipitation well above normal.

Soil moisture adequate. Fieldwork: 5.5 days suitable. Winter wheat good condition; 5% preboot, 45% boot, 50% headed, normal 15%-35%-50%. Spring wheat good condition; 80% preboot, 15% boot, 5% headed. Barley good condition, 70% pre-

boot, 25% boot, 5% headed. Sugarbeets thinned 90%, normal 70%. Alfalfa hay harvested 30%, normal 15%. Wild hay harvested 15%, normal 5%. Grasshopper activity none to light. Range feed supply and stock water adequate.

NEBRASKA: Precipitation none to 5.25 in. Temperatures 0 to 6° above normal. Scattered severe thunderstorms, high humidity, hot afternoons eastern half. Damaging hail scattered areas.

Corn good condition, cultivation, fertilization, irrigation underway. Sorghum near 100% emerged, year ago 100%. Soybeans 100% emerged, year ago 100%. Winter wheat 50% turned, year ago over 80%, normal 75%. First cutting alfalfa over 90% complete, year ago 100%. Topsoil moisture restored eastern half; isolated wind, hail damage. Subsoil moisture adequate. Fieldwork: 5.5 days suitable.

NEVADA: Mostly dry seasonable weather with gusty afternoon winds. Light precipitation north. Temperatures near normal north but several degrees above normal south. Extremes: 24 and 108°.

Dry weather favored hay harvest. Small grains developing well.

NEW ENGLAND: Soaking showers 19th and 21st, additional showers north 20th and 23d. Lows in 40's with some in 30's north on 23d and 25th. Highs up to 10° above normal south on 19th, and lows 5 to 10° subnormal 20th.

Potatoes in Aroostook County, Maine look excellent and are progressing rapidly. Insects more of problem in vegetables than normal. Heavy rains and winds lodged hay crops and some vegetables. Strawberry harvest at peak in south and beginning north. Tree fruits sizing well; June drop occurring. Cranberry prospects excellent; frost damage averted by irrigating. Hay and grass silage harvest getting underway in north and well along south. Soil moisture adequate to surplus. Grazing average to good.

NEW JERSEY: Temperatures just under normal. Extremes: 45 and 94°. Rainfall averaged 0.61 in. north, 0.77 in. central and 0.95 in. south.

Soil moisture in percent of field capacity 67% north, 57% central and 56% south. Soil temperature averaged 69° north, 73° central and south. Fieldwork: 6 days suitable. Showers improved soil moisture levels in many areas. Some hail damage to crops in isolated areas. Summer vegetable harvest increasing. Harvest of tomatoes and sweet corn started under plastic begun. Apples and peaches sizing. Blueberry harvest beginning. Field corn and soybean plantings about complete. Barley, wheat and rye maturing. Haying continues as weather conditions permit. Pasture growth generally good.

NEW MEXICO: Dry and hot with moderate windiness most afternoons. Temperatures averaged 2 to 9° warmer than normal with most sections experiencing 100° or higher.

Moisture mostly short, except east. Cotton being cultivated and chopped. Second cutting alfalfa about 75% in south; 1st cutting almost complete. Sorghum, corn about 75% planted. Winter wheat and barley harvest in full swing, wheat 30% harvested. Peanuts, chili good. Onion harvest continues active. Ranges good now, but drying quickly. Livestock good.

NEW YORK: Temperatures below normal. Extremes: 90 and 31°. Rain near or above normal mainly confined to first half of week. Last half dry and warm.

Corn and oats good condition. Dry bean planting nearly complete. Long Island potatoes in full bloom. Moisture improved pasture condition. First cutting alfalfa 53% complete; clover-timothy 35%, grass silage 65%. Cabbage planting about 85% complete. Concord grapes in full bloom Chautauqua/Erie area. Tree fruit developing; some hail damage to cherries.

NORTH CAROLINA: Temperatures normal. Precipitation above normal; thundershowers latter half of the week; southeastern heaviest hit.

Fieldwork: 5.4 days suitable. Soil moisture short to adequate. Condition tobacco, corn and cotton, fair to good; peanuts, soybeans, hay crops, Irish potatoes, sweetpotatoes, apples, peaches, and pasture fair to mostly good. Planted: Soybeans 89%, 1977 94%, average 85%; sorghum 86%, 1977 99%, average 86%; burley tobacco 95%, 1977 100%, average 99%; sweetpotatoes 88%, 1977 94%, average 88%; peanuts and flue-cured tobacco complete. Harvested: Wheat 49%, 1977 70%, average 60%; oats 59%, 1977 76%, average 70%; barley 74%, 1977 79%, average 74%; rye 58%, 1977 75%, average 68%; peaches 16%, 1977 29%, average 25%; hays 66%, 1977 52%, average 52%; Irish potatoes 56%, 1977 47%, average 42%. Corn silking 21% complete.

NORTH DAKOTA: Temperatures very close to normal; averages mid-60's. Extremes: 38 to 92°. High temperatures upper 80's. Precipitation below normal; less than 0.25 in.

Additional rains weekend kept moisture levels mostly adequate. Crops very good condition but development behind usual due to late spring. Some areas in northeast need rain. Pasture continues good.

OHIO: Temperatures normal; high 91°, low 45°. Precipitation 0.10 in. scattered locations west to 3.80 in. north quarter and southwest corner.

Crops in the northwest received much needed moisture. Main activities: Cultivating corn and soybeans, limited barley and rye harvest, hoeing tomatoes, thinning and spraying apples, harvesting truck crops, replanting soybeans and cucumbers. Corn condition good; stands indicate cutworm activity south. Beans fair to good condition; some evidence of herbicide damage southwest, poor germination due to dry topsoil and/or heavy crusting northwest. Hay baling on schedule, fair quality, leafhopper doing limited damage. Oats plagued by cereal leaf beetle northeast. Corn height 15 in., 22 in. 1977, 16 in. average. Soybean height 6 in., 9 in. 1977, 8 in. average. Wheat turning yellow 50%, 85% 1977, 80% average. Wheat ripe 5%, 25% 1977, 15% average. Oats headed 65%, 90% 1977, 80% average. Alfalfa first cutting 85%, 100% 1977, 85% average. Clover-timothy first cutting 70%, 95% 1977, 70% average. Fieldwork: 5.5 days suitable. Pasture condition very good. Soil moisture adequate.

OKLAHOMA: Precipitation statewide except Panhandle and southwest, ranging up to 2.14 in. central. Temperatures near normal except south and southwest 3 to 5° above normal, and Panhandle 7° above normal.

Topsoil and subsoil moisture supplies adequate. Wheat harvest delayed again by rains at midweek. Harvest 54%, 86% 1977, 76% normal; crops good condition. Sorghum planting 93% 1978, 1977, and normal. Grasshoppers threaten crop in the northwest; otherwise, good condition. Cotton rated good to fair with planting 98%, 98% 1977, 96% normal. Seedling disease reported less on second and third plantings. Alfalfa second cutting 64%, 61% 1977, 51% normal. Very good crop so far.

Native pastures good to excellent condition, live-stock likewise.

OREGON: Temperatures near seasonal normals. Extremes: Low 40's, low 90's west, low 30's, low 90's east. Precipitation scattered and light, amounting to less than 0.20 in.

Soil moisture adequate west, short to adequate east. Small grain and field crops in good to excellent condition. Rain needed in east. Leaf disease and root rot may reduce yield potential in west. Hay harvest underway. Peppermint looks good. Fields in east being treated for loopers; looper damage showing in west. Strawberry and red raspberry harvest underway. Harvest labor lacking in areas. Cherry harvest underway. Scab disease reported on apples and pears in west, spraying and thinning continue in east. Vegetables growing well. Potatoes emerging, spraying underway. Ranges and pasture in good to excellent shape. Irrigating underway. Feed supply adequate east, adequate to excessive west. Weed spraying underway. Cattle in good to excellent condition.

PENNSYLVANIA: Temperatures near normal south, 2 to 5° below normal north. Extremes: 93 and 40°. Showers midweek brought 0.25 to 0.50 in. most places with over 1.00 in. at scattered localities.

Fieldwork: 5 days suitable. Moisture level adequate. Activities: Filling silos and making hay; spraying; harvesting strawberries, green peas, sweet cherries, asparagus; transplanting tobacco, cabbage; cultivating potatoes. Soybean planting virtually complete. Tobacco 83% transplanted. Barley 56% turning, 5% ripe; last year 18% ripe. Wheat 12% turning, last year 35%. Oats headed 24%, last year 66%. Corn height 10 in., last year 13 in. Alfalfa first cut 74%, clo-tim 57%. Hay quality fair to good. Feed from pastures average.

PUERTO RICO: Island average rainfall 1.03 in. or 0.35 in. below normal. Temperatures about 81° on coasts and 76° interior. Extremes: 94 and 55°.

SOUTH CAROLINA: Temperatures near normal. Scattered thundershowers relieved dry weather. Mountains, foothills and northeast sections received heavier showers. No rainfall in west central.

Soil moisture short. Fieldwork: 6 days suitable. Corn fair to good but wilting; silking 62%, 74% last year; dough 19%, 29% last year. Cotton fair to good, 45% squaring, 84% last year. Topping tobacco 30%, 27% last year; condition good, nearing harvest. Soybean planting 90%, 93% last year, 87% average. Peaches good, 15% harvested, 25% last year and average. Watermelons 6% harvested, 16% last year. Tomato harvest continues very active coast.

SOUTH DAKOTA: Warm and humid conditions produced numerous thunderstorms. Temperatures near normal. Rainfall statewide but greatest in central and east.

Topsoil moisture short west and north, adequate south and east. Fieldwork: 5.2 days suitable. Sorghum 95% planted, 1977 100%, normal 100%. Sunflowers 95% planted. Oats 35% headed, 1977 97%, normal 67%. Spring wheat 25% headed, 1977 95%, normal 53%. Barley 38% headed, 1977 97%, normal 65%. Winter wheat 48% turning color, 1977 74%, normal 31%. Rye 20% turning color, 1977 70%, normal 38%. Alfalfa hay 80% harvested 1st time, 1977 95%, normal 76%. Wild hay 13% harvested, 1977 24%, normal 8%. Corn 80% cultivated 1st time, 1977 98%, normal 89%. Corn average height 11 in., 1977 27 in., normal 14 in.

TENNESSEE: Temperatures above normal west, below normal east. Highs mid-90's, lows 60's. Rainfall general; amounts ranged 0.50 to 4.00 in.

Soil moisture adequate. Fieldwork: 3.9 days suitable. Soybeans 88% planted, 1977 93%, average 85%. Tobacco 97% transplanted, 1977 and average 100%. Wheat 35% harvested, 1977 74%, average 59%. Oats 27% harvested, 1977 60%, average 52%. Corn, cotton, soybeans fair condition. Corn borer and weeds a problem. Pastures and cattle good condition.

TEXAS: Sunny skies dominated; temperatures 3 to 4° above normal coastal plains, far west, northwest Texas; 1 to 2° above normal elsewhere. No significant rainfall except coastal plains. Normal rainfall ranged 0.25 in. west Texas to 1.00 in. Red River Valley.

Cotton replanting about complete High, Low Plains; stands good growth. High temperatures depleting surface moisture at rapid rate. First bale of 1978-1979 season harvested Hidalgo County. Stands excellent progress, few insect problems. Sorghum planting nearing completion. Stands making satisfactory progress, Blacklands southward; harvest expected shortly southern areas. Hot, dry weather pushed stands southern areas to rapid maturity. Oats harvest slightly behind schedule. Corn growth satisfactory, most stands southern areas past roasting ear stage. Farmers beginning to irrigate to keep stands on schedule High Plains. Peanut planting continues behind schedule. Short moisture problem Cross-Timbers; elsewhere, few problems. Rice headed; approaching maturity upper Gulf Coast. Farmers started early harvest preparation. Cotton planted 98%, 100% 1977, 98% average. Sorghum planted 96%, 99% 1977, 98% average. Peanuts planted 81%, 89% 1977, 86% average. Soybeans planted 80%, 94% 1977, 95% average. Sunflowers planted 52%, 91% 1977, 82% average. Wheat harvested 41%, 74% 1977, 64% average. Oats harvested 88%, 99% 1977, 96% average.

Watermelons, cucumbers, bell peppers, onions, beets, tomatoes, cabbage, and squash being harvested. Bell peppers, cantaloups and watermelons made good progress. Pecan nutlets development continues; some trees central dropping nutlets. Peach harvest active central northward.

Ranges adequate grazing most areas following rains. Livestock doing well on early summer grazing, but stock tanks getting low. Hay baling active.

UTAH: Few isolated afternoon and early evening showers and thunderstorms northwest; amounts very light. Temperatures near normal ranging from 5° below to 4° above.

Soil moisture deficit becoming serious. Winter wheat fair to good; about 25% turning color. Spring grains fair to good, about 35 to 40% headed. First crop alfalfa harvest 70% complete. Field and sweet corn growing well; somewhat behind schedule with varying stages of growth because of earlier cool, wet weather. Range feed conditions favorable most areas. Dry grass some ranges beginning to be a fire hazard. Snow on higher ranges slowing movement of livestock to summer range. Cattle and sheep in good condition with adequate feed and water supplies. Movement to summer range only about 60% complete.

VIRGINIA: Temperatures near normal. Extremes: 40 and 95°. Precipitation heavy, occurring mainly as showers and thunderstorms 19th thru 22d. Rainfall averaged 1.20 in. varying from less than 0.10 in. to over 3.00 in.

Topsoil moisture mostly short to adequate. Pastures, hay, corn, peanuts, soybeans in good condition. Tobacco mostly good; only fair in a few central areas. Harvest progress: Barley 50%, 62% 1977, 65% average; oats 13%, 37% 1977, 41% average; wheat 14%, 37% 1977, 30% average. Soybean acreage 38% seeded after small grain. Corn 1% silked, 7% 1977, 4% usual. Potato digging begun on Eastern Shore.

WASHINGTON: West: Temperatures ranged from 1° above to 1° below normal. Precipitation averaged 0.30 to 0.50 in. below normal.

Strawberry and lettuce harvests continued. Raspberry picking just beginning. Good quality hay harvested. Good conditions for sweet corn development.

East: Near normal temperatures. Precipitation 0.20 to 0.30 in. below normal.

Cherry harvest active. Grains developing well. Concern centered around moisture stress and foot rot. Barley harvest begun in early areas. Green pea harvest progressing. Walla Walla sweet onions being harvested. Asparagus harvest complete.

WEST VIRGINIA: Temperatures slightly below normal northwest, above in northeast, normal elsewhere. Extremes: 93 and 39°. Precipitation below normal northwest and north central, above southwest, near normal elsewhere.

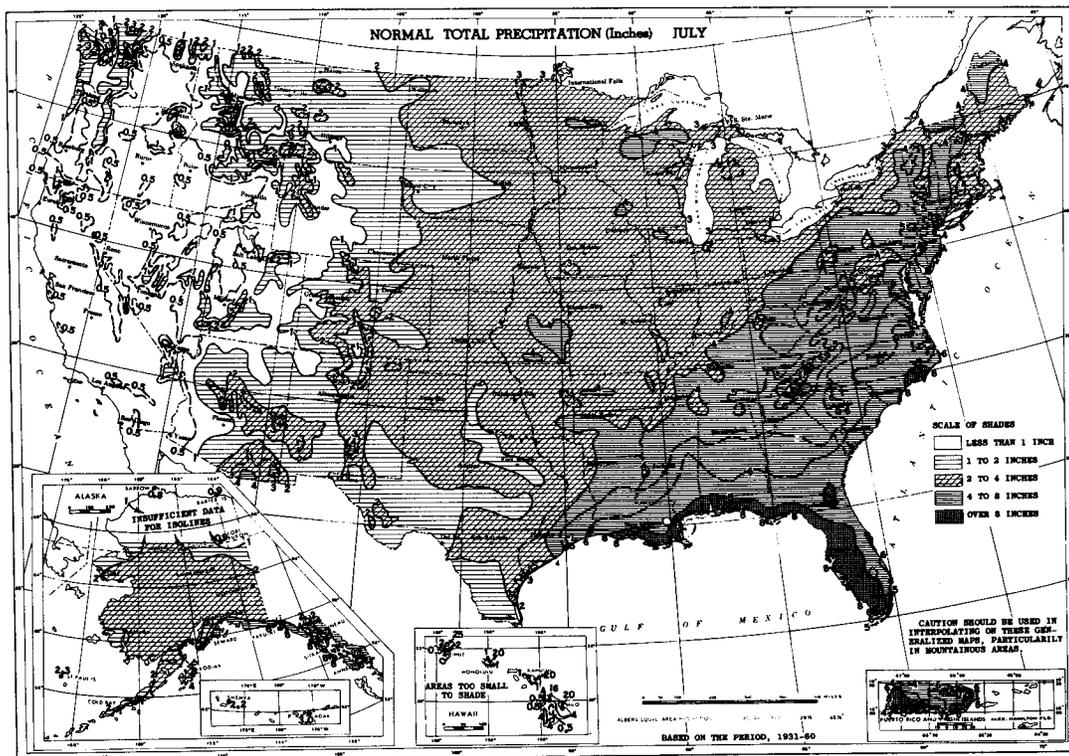
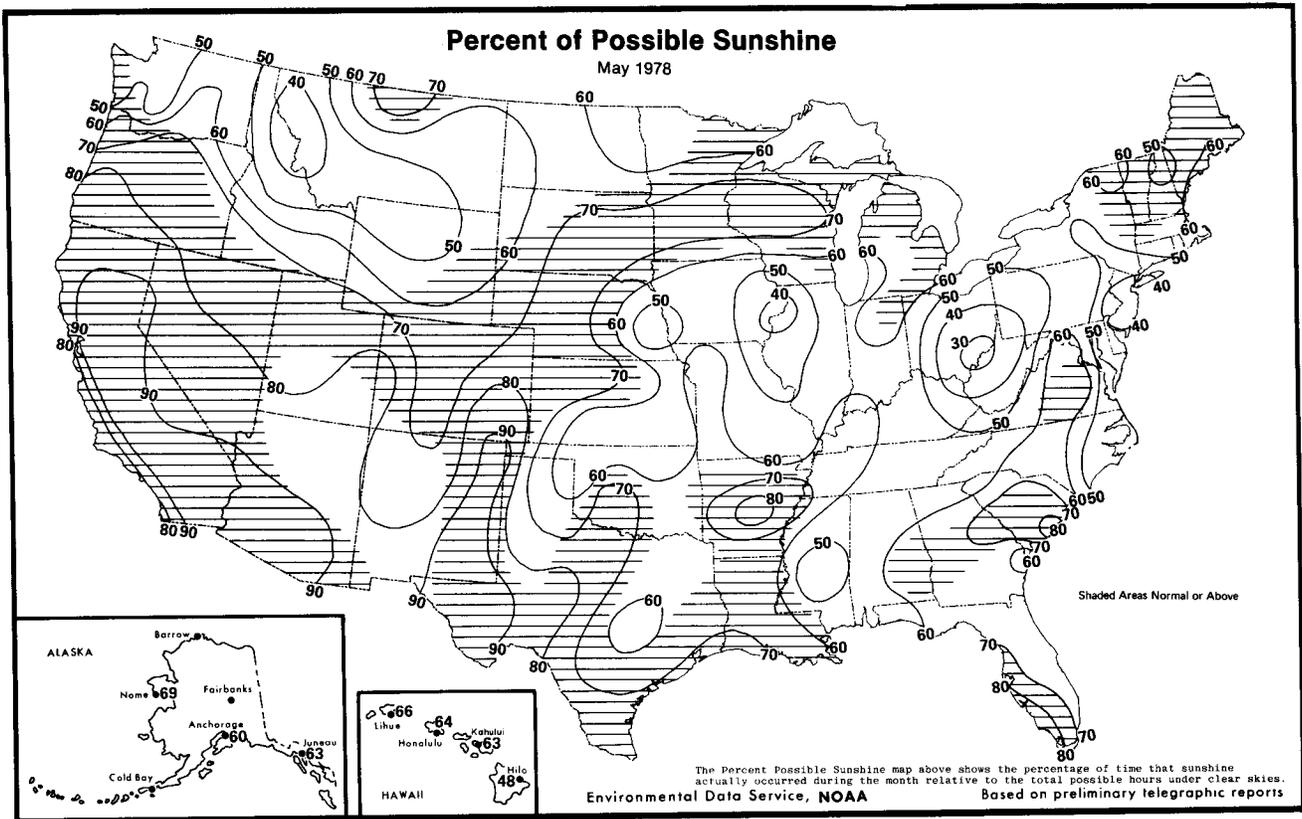
Fieldwork: 4.5 days suitable. Soil moisture mostly adequate, shortages southwest and northeast. Main activity haying. Corn more than 95% planted, in line with last year and average; emerged 92%. Wheat 10% preheaded, 85% headed, less than 5% ripe; some harvesting. Barley less than 5% preheaded, 69% headed, 24% ripe; less than 5% harvested, last year 24% harvested. Oats 52% preheaded, 47% headed, less than 5% ripe. First haying 65% complete, 72% last year, 56% average; 2d haying less than 10%. Tobacco 56% set. Condition of all crops fair to good; better than last year. No major insect or disease problems.

WISCONSIN: Temperatures 3° below normal. Extremes: 84 and 45°. Cool midweek, warm and humid weekend. Scattered showers 19th to 20th, heavier and more widespread rainfall weekend in moist, unstable air. Rainfall varied from 0.50 in. north to over 3.00 in. south central. Locally heavy rains excess 5.00 in. south central 25th.

Haying slowed by rain and poor drying weather. First crop hay 65% harvested, 1977 85%, normal 50%; quality deteriorating with harvesting delays. Second crop growth coming good. Some problems with alfalfa weevils. Corn growth improving with warmer temperatures; average height 15 in., 1977 32 in., normal 15 in. Considerable variation in corn growth. Some corn damaged by heavy rains south. Oats 20% headed, 1977 80%, normal 35%. Small grains looking better with recent moisture. Soybeans good but stands uneven. Pasture conditions above normal. Tobacco planting continues, some needs replanting after washout. Early peas being harvested. Picking strawberries. Soil moisture supplies adequate to surplus.

WYOMING: Precipitation below normal with many areas not receiving any moisture. Temperatures near normal. Maximums mostly in upper 80's and low 90's and minimums in 30's to low 40's.

Topsoil moisture short to adequate. All spring crops planted. Acreage emerged: Potatoes 79%; dry beans 90%; corn 97%. Winter wheat mostly good condition; 84% headed. First cutting alfalfa 22% compared to 41% last year. Other hay harvest started. Range in generally good condition.



World Weather and Crop Update

June 18 - 24

USSR. Light to moderate rainfall prevailed over nearly all areas of European USSR. Rainfall over the Ukraine averaged about 10 mm with the heaviest amounts along the western border and along the Black Sea. Areas in the middle Volga and southern Urals received their best rains in several weeks. Rainfall was generally 25 to 50 mm. The northern portions of Kazakhstan received approximately one-half inch (12-15 mm) of moisture. Precipitation was lightest in southeastern Ukraine and Moldavia where the winter grain harvest is just beginning. The actual rainfall amounts appear in

Figure 1 based on preliminary reports. So far this year, rainfall has been generally greater than normal in areas west of the Urals and about normal in areas east of the Urals. Winter moisture reached about normal in all areas, but April was very wet, particularly east of the Urals. The overall accumulation for two of the economic divisions of the Soviet Union appear in Figure 2. The departure from normal continues to increase in the Upper Volga River region, while accumulations have been close to normal throughout the season.

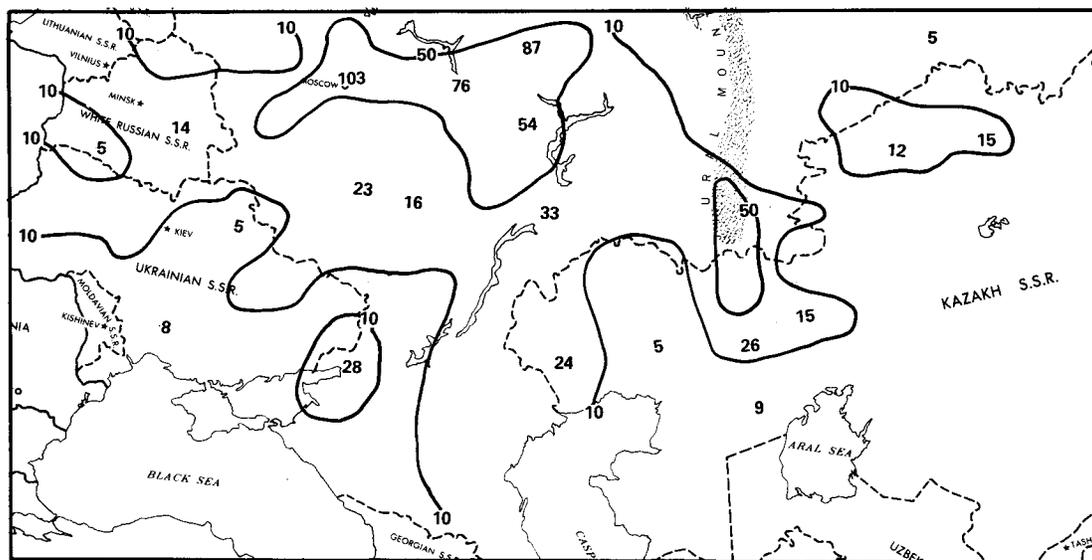


Figure 1. Total precipitation over the major crop growing regions of the USSR for the week of June 18-25, 1978

ASIA. The southwest monsoon picked up during the past week and heavy rains have penetrated all the way to the northernmost portions of India. Rain coverage was general over the entire country. Preliminary rainfall for the week appears in Figure 3. A large portion of the rain occurred in the latter half of the week. During the first part of the week, high winds and intense heat swept across northern interior areas. Windspeeds in excess of 100 mph were reported. Rainfall was general across much of Thailand, Malaysia, and Indonesia. A warm May, with frequent showers, helped to produce ideal conditions for preparations for the main rice crop; conditions through June have continued to be favorable. Rains persisted in the People's Republic of China. From 1 to 3 inches (25-75 mm) fell over much of the northern portions of the rice and tea areas to southern portions of the corn and winter wheat belts.

AUSTRALIA. The winter wheat-producing areas of Australia received good rains again. Early in the week a major storm over the Tasman Sea between Australia and New Zealand produced heavy rains along the respective coasts. A second storm gust south of the continent also contributed rainfall into South Australia. Rainfall coverage about ended from the 20th to the 22d. The north island of New Zealand received the heaviest moisture.

AFRICA. Rainfall across the Sahel continued. Moisture was generally one to two inches, except in the far western areas where amounts were much lighter. These areas had received good rains last

week. Precipitation lightly dampened other areas of the continent.

EUROPE. Crop conditions continued to improve over much of the European continent. Warm, sunny weather dominated early in the period. About mid-week a major storm system developed over the North Atlantic and swept across northern Europe producing heavy rains. The warmth and sunshine pushed crop development, which is still later than usual, but generally catching up. The areas receiving the heaviest moisture needed it the most---the northern portions of Europe and Scandinavia. Farmers had started irrigating in the Netherlands because of the dry conditions, but this should no longer be necessary.

SOUTH AMERICA. Showers moistened the southern portions of Brazil for several days. Unfortunately, the coverage was limited to the State of Rio Grande do Sul, and did not penetrate northward into the dry areas of Parana. Thundershowers fell almost daily over much of Central America, although there was very little rain over the weekend. The moisture penetrated northward into Mexico, but the dry areas of the north received no rain. Tropical Storm Carlotta approached the coast of Mexico at midweek, but moved westward over the Pacific.

NORTH AMERICA. Cool, showery weather dominated the weather picture over the Canadian Prairie Provinces. Soil moisture continued more than adequate in all provinces. Hay and pastures are reported to be excellent.

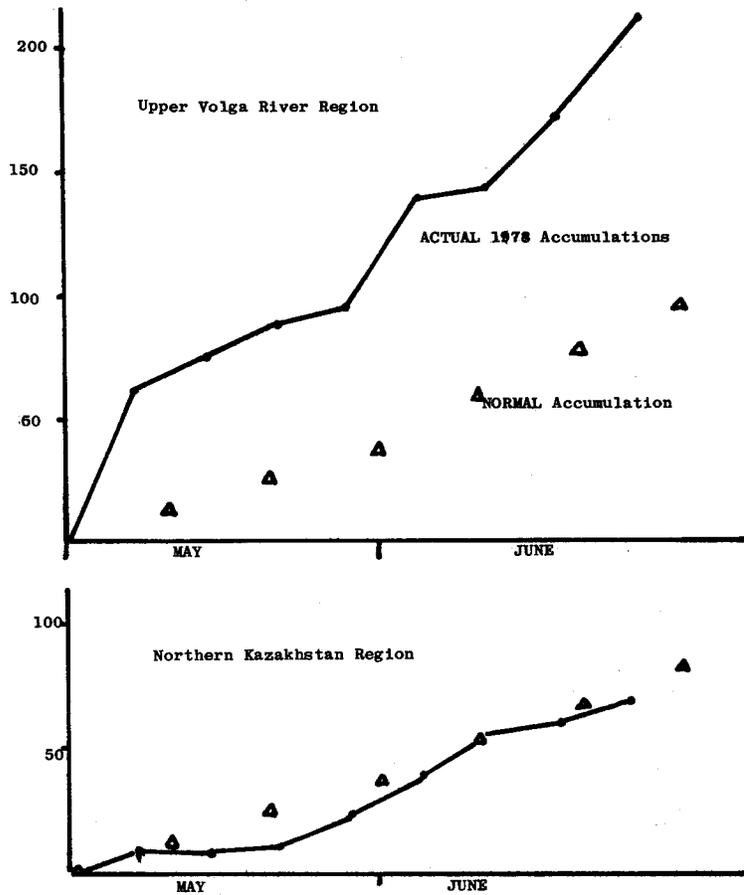


Figure 2. Seasonal accumulation of precipitation in two of the economic regions of the USSR so far in 1978.

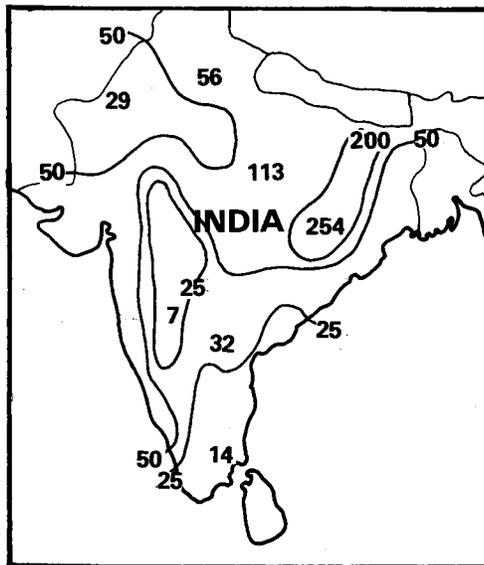
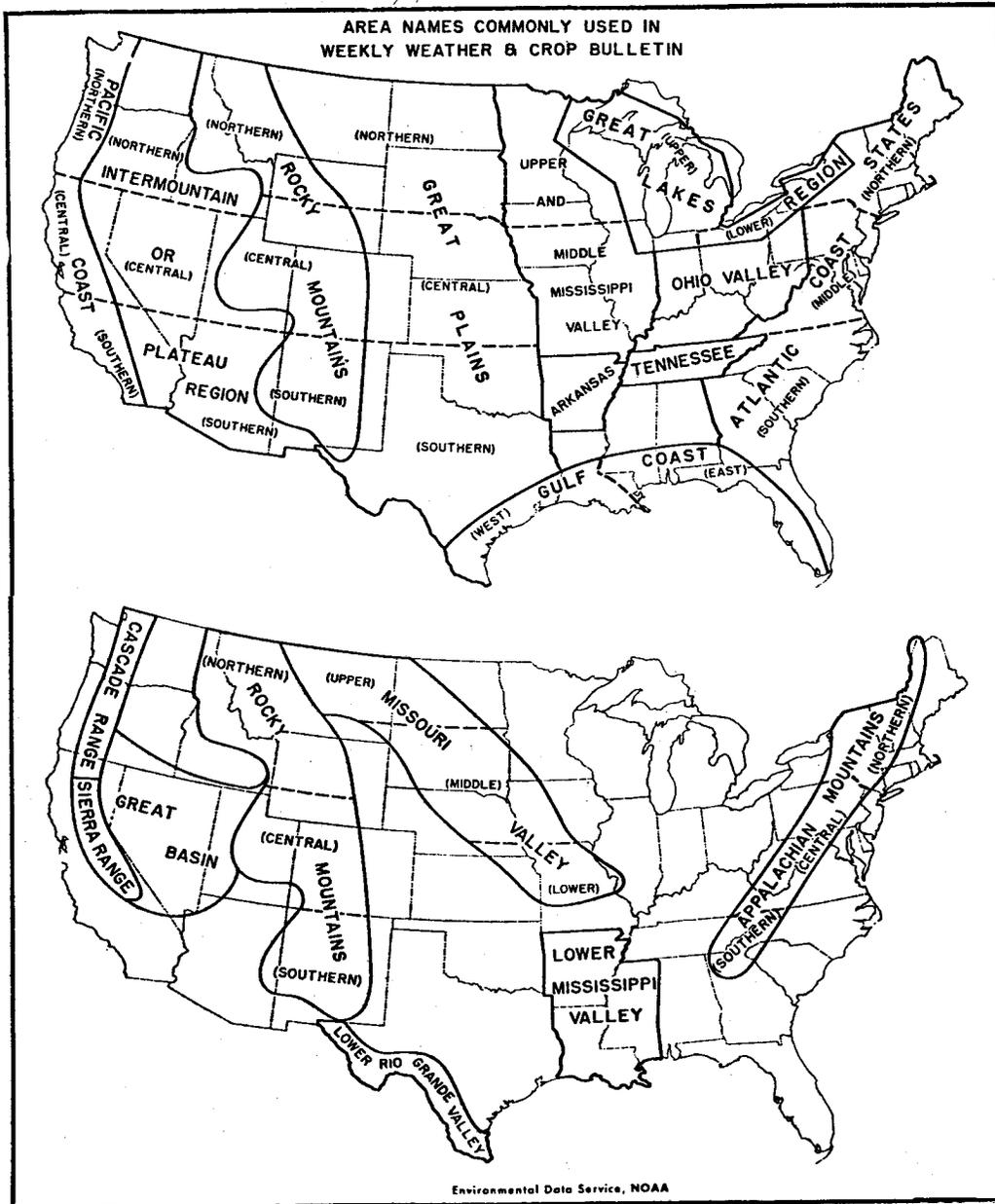


Figure 3. Total precipitation in India for the week of June 18-25, 1978 (based on preliminary weekly data).



WHEN OTHER AREAS ARE MENTIONED, SUCH AS STATES OR GROUPS OF STATES, OTHER WELL KNOWN NAMES ARE USED.

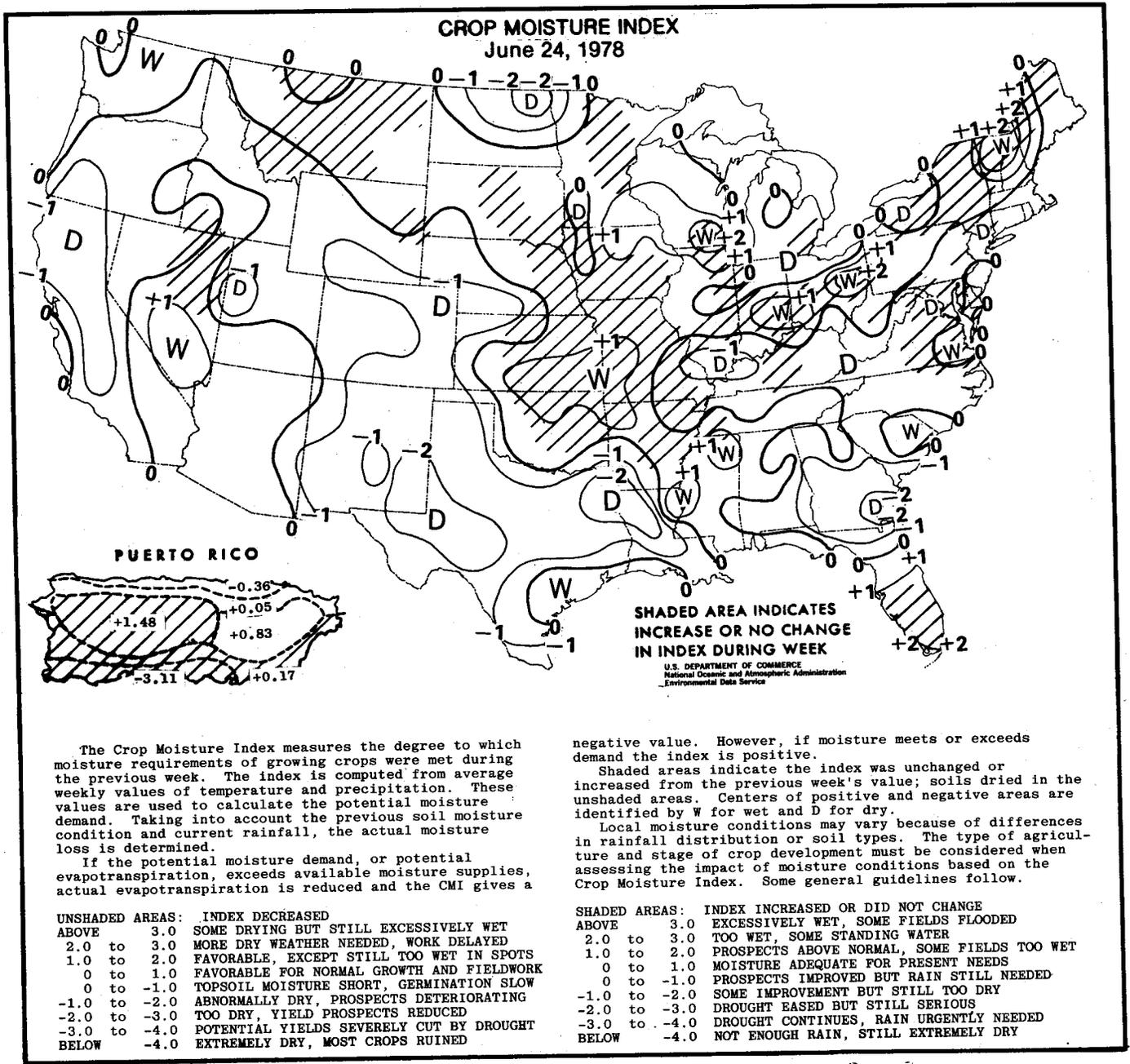
(continued from page 2)

eleventh consecutive day, tying the city's all-time long hot spell.

Intense weather charged over the Nation's midlands on Sunday. From the northern half of the Plains to the Corn Belt to lower Michigan, tornadoes and heavy rain left their marks. Minneapolis/St. Paul and Rockford, Ill., measured two and one-half to 3 inches of rain in less than an hour. Points in Montana, Wisconsin, and Michigan gathered

2 inches. Central Indiana was especially hard hit when nighttime cloudbursts opened up with 5 to 7 inches of rain. In all 12 tornadoes clipped the country, 10 of them in the central U.S. and 2 in Florida.

Again very hot weather baked the Southwest. El Paso, at 109°, set another record for the day and extended its streak of 100° or more to a record 12 days, topping the June 1960 string.



PRICE INCREASE

This action is necessary because of the increased cost of publication and the recent hike in postage rates. We intend to improve the contents of the Bulletin. During the next 6 months, the Bulletin will include additional agriculturally related weather parameters and expanded international coverage affecting crops worldwide.

IMMEDIATE - U. S. Weather Report
 This Report Will be Treated in All Respects as Letter Mail
FIRST CLASS MAIL

POSTAGE AND FEES PAID
 U.S. DEPARTMENT OF COMMERCE
 COM 210



SEEDING PROGRESS

PERCENT OF ACREAGE PLANTED
 AS OF JUNE 25

soybeans

	1978	1977	AVG.
ALA	92	83	91
ARK	89	92	92
GA	89	86	87
ILL	97	100	100
IND	95	100	90
IOWA	100	100	100
KANS	85	85	80
KY	90	85	85
LA	94	89	85
MICH	100	100	95
MINN	100	100	100
MISS	88	90	83
MO	90	100	85
NERR	100	100	100
N C	89	94	85
OHIO	100	100	100
S C	90	93	87
TENN	88	93	85
TEX	80	94	95
U.S.	94	96	93

THESE 19 STATES PRODUCED 96%
 OF THE 1977 U.S. SOYBEAN CROP.

sorghum

	1978	1977	AVG.
COLO	100	100	90
KANS	90	90	85
MO	88	97	87
NEBR	100	100	100
OKLA	93	93	93
S DAK	95	100	100
TEX	96	99	98
7-STATES	94	96	93

THESE 7 STATES PRODUCED 93%
 OF THE 1977 U.S. SORGHUM CROP.

HARVESTING PROGRESS

PERCENT OF ACREAGE HARVESTED
 AS OF JUNE 25

winter wheat

	1978	1977	AVG.
COLO	0	1	1
ILL	0	0	0
IND	0	0	0
KANS	5	30	25
MO	21	57	35
MONT	0	0	0
NEBR	0	0	0
OHIO	0	0	0
OKLA	54	86	76
S DAK	0	0	0
TEX	41	74	65
11 STATES	18	37	32

THESE 11 STATES PRODUCED
 75% OF THE 1977 U.S. WINTER
 WHEAT CROP.